



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

romena leucocephala, Mx., *Rhynchospora macrostachya*, Torr., *Carex gigantea*, Rudge *Cherokeensis*, Schk., and *verrucosa*, Ell., *Paspalum undulatum*, Poir., *Panicum? molle* Mx., and *gymnocarpum*, Ell., *Crataegus apiifolia*, Mx., and *Aspidium cristatum*, Swartz, var., *Floridanum*, with others previously detected.

Other plants seen growing sparingly upon the Keys were *Canavalia obtusifolia*, DC., *Rhizophora Mangle*, L., and *Laguncularia racemosa*, Gaertn., these with a few others mentioned find here perhaps their northern limit.

The arrangements completed, the present flora about exhausted, I was quite willing to depart southward in a small schooner beyond the distant highlands of Tampa to enter upon the study of a new field of nature's richest floral displays.—DR. A. P. GARDNER.

NOTES ON THE HISTORY OF *HELIANTHUS TUBEROSUS*, THE SO-CALLED JERUSALEM ARTICHOKE; by J. Hammond Trumbull and Asa Gray, American Journal of Science and Arts, May, 1877.—We make the following extract: "Linnaeus, in the *Species Plantarum*, gave to *Helianthus tuberosus* the 'habitat in Brasilia.' In his earlier *Hortus Cliffortianus* the habitat assigned was 'Canada.' M. Alphonse DeCandolle, in his *Géographie Botanique*, II., 824, (1855), refers to this as 'decidedly an error, at least as to Canada properly so-called,' assigns good reasons for the opinion that it did not come from Brazil, nor from Peru (to which the name under which it appeared in cultivation in the Farnese garden seemed to refer), but in all probability from Mexico or the United States. He adds that Humboldt did not meet with it in any of the Spanish colonies.

About this time I received from my friend and correspondent, the late Dr. Short, of Kentucky, some long and narrow tubers of *Helianthus doronicoides*, Lam., with the statement that he and some of his neighbors found them good food for hogs, and, if I rightly remember, had planted them for that purpose. They were planted here in the Botanic Garden; after two or three years it was found that some of the tubers produced were thicker and shorter; some of these were cooked along with Jerusalem Artichokes, and found to resemble them in flavor, although coarser. Consequently, in the second edition of my *Manual of the Botany of the Northern United States* (1856), it is stated that *H. doronicoides* is most probably the original of *H. tuberosus*. This opinion was strengthened year after year by the behavior of the tubers, and by the close similarity of the herbage and flowers of the two plants, as they grew side by side; indeed, as the two patches were allowed to run together in a waste or neglected place, they have become in a measure confounded. Wishing to obtain an unmixed stock, I applied last autumn to Prof. J. M. Coulter, of Hanover, Indiana, and received from him a good number of tubers from wild plants of the neighborhood, which will now be grown. Some of these were slender, some thicker and shorter, and a few were to all appearance identical with Jerusalem artichokes. If they were really all from one stock, as there is reason to believe, the question of the origin of *Helianthus tuberosus* is well nigh settled.

ADDITIONS TO THE FLORA OF IOWA.—Since my last report, I find the following rare plants, to be added to Arthur's Catalogue of Iowa Plants, discovered in mounting my collection:

Euphorbia obtusata, Parsh., Prof. F. L. Harvey, 1875, Des Moines river banks near Humboldt.

Habenaria obtusata, Lindl., Mrs. J. McNeil, 1875, abundant in Harrison Co., Iowa, groves.

Desmodium pauciflorum, DC., Groves, Ames, 1876.

Hypericum nudiflorum, Michx., Brink of Cedar River, five miles above Cedar Rapids, June 26, 1876.

Cymopterus glomeratus, Prof. F. L. Harvey, 1875, Humboldt, Ia. A rare plant here.

Setaria Italica, Kunth., College Farm, Ames, 1876.

Setaria verticillata, Beauv. College farm, large as millet!

Panicum depauperatum, Muhl. Woodbine to Ames.

Lolium perenne, L., Ames, dooryards, to Denison.

Poa alsodes, Gray, Woodbine 1875, Humboldt, Prof. F. L. Harvey, 1875.

Eragrostis Purshii, Schrœd. Woodbine, 1875.

Festuca elatior L. Near Ames, 1876.

VARIATIONS.—The normal *Erythronium albidum* from Illinois to W. Iowa, noted for spotted, broad leaves and very recurved petals, confined to groves; while a much smaller form from W. Iowa to Kansas, confined to the *prairies*, has narrow leaves, *never* spotted, petals *never recurved*, not half the height of the former. The difference is doubtless due to soil and locality.

As far as known to me, I was the first to discover this form; while the value and beauty of the *two* forms must be seen as they grow, (not in *hortis siccis*;) to be appreciated.

A still more noted variation is the *two* forms of *Cypripedium candidum*, the larger belonging exclusively to the Missouri "slope," W. Iowa, and at an invariable elevation of 100 feet above Boyer Valley (where it abounds,) on the steep, *loose* soil of the Sandy bluffs, no doubt to retain its original elevations here, and to the very verge of the "Divide," when we enter a new kingdom as to soil, air and flora! I never saw the smaller form till coming here, nor does it occur within 60 miles of the larger, the latter beginning at Woodbine, Harrison county, the former (as you advance eastward) at Carroll, Carroll county. The larger form seems more properly allied to *C. spectabile* than to *C. candidum*, and the two look like giant and pigmy side by side in a Herbarium.

Still much the same is true of the size of leaves in the eastern and western Iowa forms of *Lobelia spicata*.

Apropos of the surprising crop of *Valeriana sylvatica* appearing one year and all gone the next. In 1869 I saw a slough six rods or more long by 25 feet wide *covered all over in one mass of white bloom, like snow*, with our common *Ranunculus aquatilis*, while not *one* plant has appeared since, and I had to wait for seven years and go 212 miles to find a specimen, in Cedar River, 1876.

R. BURGESS, Ames, Iowa.

SOME HARDY DENTARIAS.—About the middle of this month, as I was botanizing in the woods I found many small patches of *Dentaria luciniata* in bloom. It was early in the morning, and almost everything was covered with hoar frost. This was the case with *Dentaria*. In most all of the patches, however, there were one or two plants not touched by the frost. While many were black and cracked between the fingers, a few retained their freshness, notwithstanding they were sometimes entirely surrounded by the others. Darwin in his "Variation of Animals and Plants," mentions this fact in regard to peas growing in his garden, and thinks that there is a difference in the constitution of individual plants, so that some are better able to withstand the frost than others. As the *Dentarias* referred to were all equally exposed and growing close together, the fact of some being frosted while others were not, cannot be explained by saying there was a difference in soil or exposure. Darwin's explanation is a good one and no doubt correct. The fact is certainly a curious one.—JOSEPH F. JAMES, Cincinnati, Ohio.

SOME KANSAS PLANTS.—On page 10, Vol. 1, No. 3. of the BOT. BULLETIN, G. C. Broadhead says of *Aethiops speciosa*: "It generally prefers a rich limestone soil of but a few inches thickness, resting on limestone." I have found just the reverse to be the case here, as it is quite common on the river bottoms where the soil is rich and deep, but I have never found it on the limestone bluffs where the soil is such as Mr. Broadhead describes; while *Aethiops Missouriensis* is abundant in such situations and avoids the bottom lands.

I found *Clematis ochroleuca*, Ait., in bloom April 28th, on the highlands between the Solomon and Republican rivers, Cloud county. I see Gray's Manual says it is rare,